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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,968

09/08/2004

Masayuki Nate

121042

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25944

7590

05/31/2007

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EXAMINER

LU, JIPING

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/506,968

**Applicant(s)**

NATE ET AL.

**Examiner**

Jiping Lu

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) 16, 17, 19, 23, 25, 27, 29 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 15, 18, 22, 24, 28, 30, 32, 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/3/07
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Status***

1. Claims 1-13 and 20-21 have been canceled. Claims 14-19 and 22-33 are now in the case and subject to restriction requirement (35 USC 121). Non-elected claims 17, 19, 23, 25, 27, 29 and 31 are withdrawn from consideration. Amended claim 16 is held to be withdrawn from consideration because it depends on a non-elected claim 17. Claims 14-15, 18, 22, 24, 26, 28, 30 and 32-33 remain rejected as below.

### ***Election/Restrictions***

2. Applicant's election with traverse of Species I, claims 14, 15, 16, 18, 20, 22, 24, 26, 28, 30, 32, 33 in the reply filed on 3/9/07 is acknowledged. The traversal is on the ground(s) that the species I and Species II are related enough that a search for the subject matter of one Species would incorporate a search for the subject matter of the other Species and the search and examination of the entire application could be made without serious burden. This is not found persuasive because the restriction was given under PCT Rule 13.1 for lacking unity of invention since Species I and Species II are not so linked as to form a single general inventive concept. There is no same or corresponding special technical features for the Species I and Species II even as stated by the applicant that the inventive concept for Species I is a drying step starting in a state covering at least part of the outer wall with a guide covering the outer wall so as to not come into contact with the other wall because this is not the inventive concept for Species II. There are two different inventive concepts.

The requirement is still deemed proper and is therefore made FINAL.

3. This application contains claims 17, 19, 23, 25, 27, 29, 31 drawn to an invention nonelected with traverse in the reply filed on 3/9/07. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 14 and 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Takamitsu et al. (JP 2001-019560).

Takamitsu disclose a method of drying a honeycomb formed body wherein the ceramic honeycomb body 13 is dried by covering at least a part of the outer wall with a guide 11, 12 spaced without contact from the outer surfaces of the honeycomb same as the applicant's. With regard to the added limitations of the canceled claim 20, it is clearly shown by the drawing of Takamitsu et al. (see Figure 1).

6. Claims 14 and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Takamitsu et al. (JP 2002-020173).

Takamitsu disclose a method of drying a honeycomb formed body wherein the ceramic honeycomb body M1 is dried by covering at least a part of the outer wall with a guide G1 spaced without contact from the outer surfaces of the honeycomb same as the applicant's. With regard

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to the added limitations of the canceled claim 20, it is clearly shown by the drawing of Takamitsu et al. (see Figure 4).

7. Claims 14, 18, 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Yano et al. (U. S. Pat. 6,725,567).

Yano et al. disclose a method of drying a honeycomb formed body wherein the ceramic honeycomb body 1 is dried by covering at least a part of the outer wall with a guide 5 spaced without contact from the outer surfaces of the honeycomb same as the applicant's. The guide 5 has an opening (at 6). With regard to the added limitations of the canceled claim 20, it is clearly shown by the drawing of Tano et al (see Figure 1).

8. Claims 14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Brundage et al. (U. S. Pat. 5,388,345).

Brundage et al. disclose a method of drying a honeycomb formed body wherein the honeycomb body 30 is dried by covering at least a part of the outer wall with a guide 20 spaced without contact from the outer surfaces of the honeycomb same as the applicant's. The guide 20 has an opening (not numbered, see Fig. 4a). With regard to the added limitations of the canceled claim 20, it is clearly shown by the drawings of Brundage et al. (see Figures 1a,1b, 4a, 4b).

9. Claims 14, 18 and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Araya (U. S. Pat. 6,539,633 as previously shown incorrectly) (corrected U.S. Pat. 6,539,644).

Araya et al. disclose a method of drying a honeycomb formed body wherein the ceramic honeycomb body 10 is dried by covering at least a part of the outer wall with a guide 12 spaced without contact about and from the outer surfaces of the honeycomb same as the applicant's. The

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guide 5 has an opening (at 20). With regard to the added limitations of the canceled claim 20, it is clearly shown by the drawings of Araya (see Figures 1-2).

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takamitsu et al. (JP 2001-019560) or Takamitsu et al. (JP 2002-020173) or Yano et al. (U. S. Pat. 6,725,567) or Brundage et al. (U. S. Pat. 5,388,345) or Araya (U. S. Pat. 6,539,633).

The honeycomb formed body drying method of Takamitsu et al. (560' or 173') or Yano et al. or Brundage et al. or Araya as above includes all that is recited in claim 15 except for the distance between the outer wall and the guide covering the outer wall. It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the guide at any desired distance from the outer wall of the honeycomb body in order to obtain optimum drying result since applicant has not disclosed that the claimed distance solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art, and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

12. Claims 22, 24, 26, 28, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takamitsu et al. (JP 2001-019560) or Takamitsu et al. (JP 2002-020173) or Yano et al. (U. S.

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Pat. 6,725,567) or Brundage et al. (U. S. Pat. 5,388,345) or Araya (U. S. Pat. 6,539,633) in view of Miura et al. (U. S. Pat. 6,932,932) or Kazuya (JP 2001-130973).

The honeycomb formed body drying method of Takamitsu et al. (560' or 173') or Yano et al. or Brundage et al. or Araya as above includes all that is recited in claims 22, 24, 26, 28, 30 except for the drying includes a microwave drying step followed by a hot air drying step. Miura et al. or Kazuya teaches a method for drying a honeycomb formed body including the steps of microwave drying and a hot air drying after the microwave drying for uniformly and rapidly drying the honeycomb body. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the drying method of Takamitsu et al. (560' or 173') or Yano et al. or Brundage et al. or Araya to include drying steps of microwave drying followed by hot air drying as taught by Miura et al. or Kazuya in order to uniformly and rapidly drying the honeycomb body. With regard to the claimed range of microwave output and dewatering ratio, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the any desired microwave output range and dewatering ratio in order to obtain optimum drying result since applicant has not disclosed that the claimed distance and pressure solve any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art, and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

***Response to Arguments***

13. Applicant's arguments filed 3/9/07 have been fully considered but they are not persuasive to overcome the restriction requirement and rejection. First, on pages 5 and 6 of the Remarks, the applicant argues that Species I and Species II are related and Election of Species Requirement should be withdrawn. The examiner disagrees because restriction was given under PCT Rule 13.1 and Species I and Species II are not so linked as to form a single general inventive concept. The applicant also argues that there is no search burden shown to search all claims. The examiner disagrees also. In order to conduct a quality search and perform a quality examination, there are definitely searches involved in Species II that is not required for search of Species I claims. The search of Species I claims is different from search of Species II claims. Therefore, there is always a serious burden of search for additional Species II claims. Second, on pages 6 -7 of Remarks, the applicant argues that the limitation of claim 16 does further limit the scope of independent claim 14. However, the applicant's argument is deemed to be moot because claim 16 is now depended upon a non-elected claim 17. Claim 16 is now withdrawn from further consideration. Third, on page 5 of Remarks, the applicant argues that Fig. 9 should be included as part of Species I. This is not true because the applicant has clearly stated in the specification (page 5) that Fig. 9 is another type of guide, e.g. embodiment. Therefore, it can not be said the Fig. 9 is part of the Species I. Furthermore, the description of Fig. 9 clearly does not show or suggest the limitation of "a drying step starting in a state covering at least part of the outer wall with a guide covering the outer wall so as to not come into contact with the other wall' as stated in claim 14. Fourth, on pages 8-9 of the Remarks, the applicant argues that broad claim 14 calls for the area to be covered in the range of 20 to 80% and none of the prior art references



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show such claimed numerical range of 20-80%. The examiner disagrees because the prior art references clearly show and teach such wide numerical range 20-80% in the drawings.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KENNETH RINEHART** can be reached on 571 272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jiping Lu  
Primary Examiner  
Art Unit 3749

J. L.